

LBP30AND31.ST25.txt
SEQUENCE LISTING

<110> Lonza Biologics plc.

<120> Method of expressing recombinant protein in CHO cells

<130> LBP30+31

<140> NA 25/01

<141> 2002-07-.

<160> 4

<170> PatentIn version 3.1

<210> 1

<211> 6679

<212> DNA

<213> Hamster sp.

<220>

<221> misc_feature

<223> Seq. ID. No. 4: circular plasmid GS vector p12.4 short mCMV-GFP /
clone 3

<400> 1		
gaattcattg atcataatca gccataccac atttgttagag gttttacttg cttaaaaaaa		60
cctcccacac ctccccctga acctgaaaca taaaatgaat gcaattgttg ttgttaactt		120
gtttattgca gcttataatg gttacaaata aagcaatagc atcacaaatt tcacaaataa		180
agcatttttt tcactgcatt ctagttgtgg tttgtccaaa ctcatcaatg tatcttatca		240
tgtctggcgg cgcgcacctg caggcgcaga actggtaggt atggaagatc cctcgagatc		300
cattgtgctg gcggtaggctc agcagcgct gcctgaagct gcgggcattc ccagtcagaa		360
atgagcgcca gtcgtcgctg gctctggca ccgaagtgt atgattctcc gccagcatgg		420
cttcggccag tgcgtcgagc agcgcccgct tgttcctgaa gtgccagtaa agcgccggct		480
gctgaacccc caaccgttcc gccagttgc gtgtcgtcag accgtctacg ccgacacctcg		540

LBP30AND31.ST25.txt

tcaacaggta	cagggcggca	cgatca	tatcggtc	caacttgc	atgtttgaca	600
ctttatca	gataaacata	atatgtccac	caacttatca	gtgataaaaga	atccgcgcca	660
gcacaatgga	tctcgaggta	gaggatctc	tagaggatcc	atattcgcc	gcatcacccg	720
cggcacaggt	gcgggtgctg	gcgcctata	cgccgacatc	accgatgggg	aagatcgggc	780
tcgcccacttc	gggctcatga	gctgttgc	cggtgtgggt	atggtggcag	gccccgtggc	840
cggggactg	ttgggcgcca	tctcctgca	tgcaccattc	cttgcggcgg	cgggtctcaa	900
cggcctcaac	ctactactgg	gctgcttcct	aatgcaggag	tcgcataagg	gagagcgtcg	960
acctcgggccc	gcgttgctgg	cgttttcca	taggctccgc	ccccctgacg	agcatcacaa	1020
aaatcgacgc	tcaagtca	ggtggcggaa	cccgacagga	ctataaagat	accaggcg	1080
tccccctgga	agctccctcg	tgcgtctcc	tgttccgacc	ctggcgttta	ccggataac	1140
gtccgcctt	ctcccttcgg	gaagcgtggc	gctttctcat	agctcacgct	gtaggtatct	1200
cagttcggtg	taggtcg	gctccaagct	gggctgtgtg	cacgaacccc	ccgttcagcc	1260
cgaccgctgc	gccttatccg	gtaactatcg	tcttgagtcc	aacccggtaa	gacacgactt	1320
atcgccactg	gcagcagcca	ctggtaacag	gattagcaga	gcgaggat	taggcgg	1380
ta	caagatgttc	ttgaagtgg	ggcctaacta	cggtcacact	agaagaacag	1440
ctgcgtctg	ctgaagccag	ttacccctcg	aaaaagagtt	ggtagcttt	gatccggca	1500
acaaaccacc	gctggtagcg	gtggttttt	tgttgc	cagcagatta	cgcgcagaa	1560
aaaaggatct	caagaagatc	cttgatctt	ttctacgggg	tctgacgctc	agtggAACGA	1620
aaactcacgt	taagggattt	tggcatgag	attatcaaa	aggatcttca	cctagatcct	1680
tttaaattaa	aaatgaagtt	ttaaatcaat	ctaaagtata	tatgagtaaa	cttgg	1740
cagttaccaa	tgcttaatca	gtgaggcacc	tatctcagcg	atctgtctat	ttcg	1800
catagttgcc	tgactccccg	tcgtgttagat	aactacgata	cgggagg	taccatctgg	1860
ccccagtgct	gcaatgatac	cgcgagaccc	acgctcacccg	gctccagatt	tatcagcaat	1920
aaaccagcca	gccggaaggg	ccgagcgcag	aagtggcct	gcaactttat	ccgcctccat	1980
ccagtctatt	aattgttgc	ggaaagctag	agtaagttagt	tcgcccagtta	atagttgc	2040
caacgttgtt	gccattgcta	caggcatcgt	ggtgtcacgc	tcgtcg	gtatgg	2100
attcagctcc	ggttcccaac	gatcaaggcg	atttacatga	tcccccattt	tgtgc	2160
agcggttagc	tccttcgg	ctccgatcgt	tgtcaga	aagtggccg	cagtgttac	2220
actcatggtt	atggcagcac	tgcataattc	tcttactgtc	atgccatccg	taagatgctt	2280
ttctgtgact	ggtgagtagt	caaccaagtc	attctgagaa	tagtgtatgc	ggcgaccgag	2340
ttgctcttgc	ccggcgtcaa	tacggataa	taccgcgcca	catagcagaa	ctttaaaagt	2400
gctcatcatt	ggaaaacgtt	cttcggggcg	aaaactctca	aggatcttac	cgctgttgag	2460
atccagttcg	atgttaaccc	ctcg	tgcacc	caactgatct	tcagcatctt	2520
cagcg	tttct	gggtgagcaa	aaacaggaag	gcaaaaatgc	gcaaaaagg	2580

LBP30AND31.ST25.txt

gacacggaaa	tggtgaatac	tcatactctt	ccttttcaa	tattattgaa	gcatttatca	2640
gggttattgt	ctcatgagcg	gatacatatt	tgaatgtatt	tagaaaaata	aacaaatagg	2700
ggttccgcgc	acatttcccc	gaaaagtgc	acctgacgc	taagaaacca	ttattatcat	2760
gacattaacc	tataaaaata	ggcgtatcac	gaggccctga	tggctcttg	cggcacccat	2820
cgttcgtaat	gttccgtggc	accgaggaca	accctcaaga	gaaaatgtaa	tcacactggc	2880
tcacccctcg	gtgggccttt	ctgcgtttat	aaggagacac	tttatgttta	agaaggttgg	2940
taaattccctt	gcccgtttgg	cagccaagct	agatccggct	gtggaatgtg	tgtcagttag	3000
ggtgtggaaa	gtccccaggc	tccccagcag	gcagaagtat	gcaaagcatg	catctcaatt	3060
agtcagcaac	caggtgtgga	aagtccccag	gctccccagc	aggcagaagt	atgcaaagca	3120
tgcatctcaa	ttagtcagca	accatagtcc	cgcccccta	tccgcccata	ccgccccctaa	3180
ctccgcccag	ttccgcccata	tctccgcccc	atggctgact	aatttttttt	atttatgcag	3240
aggccgaggc	cgcctcgccc	tctgagctat	tccagaagta	gtgaggaggc	ttttttggag	3300
gcctaggctt	ttgcaaaaag	ctagcttggg	gccaccgctc	agagcacctt	ccaccatggc	3360
cacctcagca	agttcccact	tgaacaaaaa	catcaagcaa	atgtacttgt	gcctgcccc	3420
gggtgagaaa	gtccaagcca	tgtatatctg	ggttgatggt	actggagaag	gactgcgctg	3480
caaaacccgc	accctggact	gtgagccaa	gtgtgtagaa	gagttacctg	agtggaaattt	3540
tgatggctct	agtaccccttc	agtctgaggg	ctccaacagt	gacatgtatc	tcagccctgt	3600
tgccatgttt	cgggaccct	tccgcagaga	tcccaacaag	ctgggtttct	gtgaagtttt	3660
caagtacaac	cggaaagcctg	cagagaccaa	tttaaggcac	tcgtgtaaac	ggataatgga	3720
catggtgagc	aaccagcacc	cctggtttgg	aatggaacag	gagttactc	tgatggaaac	3780
agatgggcac	ccttttgggt	ggccttccaa	tggctttcct	ggggcccaag	gtccgtatta	3840
ctgtgggtgt	ggcgcagaca	aagcctatgg	cagggatatc	gtggaggctc	actaccgcgc	3900
ctgcttgtat	gctggggtca	agattacagg	aacaaatgct	gaggtcatgc	ctgcccagtg	3960
ggaactccaa	ataggaccct	gtgaaggaat	ccgcatggg	gatcatctct	gggtggcccg	4020
tttcatcttg	catcgagtat	gtgaagactt	tgggtaata	gcaacctttg	accccaagcc	4080
cattcctggg	aactggaatg	gtgcaggctg	ccataccaa	tttagcacca	aggccatgcg	4140
ggaggagaat	ggtctgaagc	acatcgagga	ggccatcgag	aaactaagca	agcggcaccg	4200
gtaccacatt	cgagcctacg	atcccaaggg	gggcctggac	aatgcccgtg	gtctgactgg	4260
gttccacgaa	acgtccaaca	tcaacgactt	ttctgctggt	gtcgccaatc	gcagtgccag	4320
catccgcatt	ccccggactg	tcggccagga	gaagaaaggt	tactttgaag	accgcggccc	4380
ctctgccaat	tgtgaccct	ttgcagtgac	agaagccatc	gtccgcacat	gccttctcaa	4440
tgagactggc	gacgagccct	tccaatacaa	aaactaatta	gactttgagt	gatcttgagc	4500
ctttcctagt	tcatcccacc	ccgccccaga	gagatcttgc	tgaaggaacc	ttacttctgt	4560
ggtgtgacat	aattggacaa	actacctaca	gagattaaa	gctctaaggt	aaatataaaa	4620

LBP30AND31.ST25.txt

tttttaagtg tataatgtgt taaactactg attctaattg tttgtgtatt ttagattcca	4680
acctatggaa ctgatgaatg ggagcagtgg tggaatgcct ttaatgagga aaacctgttt	4740
tgctcagaag aaatgccatc tagtgatgat gaggctactg ctgactctca acattctact	4800
cctccaaaaa agaagagaaa ggtagaagac cccaggact ttccttcaga attgctaagt	4860
ttttttagtc atgctgtgtt tagtaataga actcttgctt gctttgctat ttacaccaca	4920
aaggaaaaag ctgcactgct atacaagaaa attatggaaa aatattctgt aaccttata	4980
agtaggcata acagttataa tcataacata ctgtttttc ttactccaca caggcataga	5040
gtgtctgcta ttaataacta tgctcaaaaa ttgtgtacct ttagctttt aatttgtaaa	5100
ggggtaata aggaatattt gatgtatagt gccttgacta gagatcataa tcagccatac	5160
cacatttgc gaggttttac ttgcttaaa aaacctccca cacccccc tgaacctgaa	5220
acataaaatg aatgcaattt ttgttgcattt cttgtttatt gcagcttata atggttacaa	5280
ataaaagcaat agcatcacaa atttcacaaa taaagcattt ttttcaactgc attctagtt	5340
tggtttgcctt aaactcatca atgtatctt tcatgtctgg atctctagct tcgtgtcaag	5400
gacggtgagg cgccgcctact gagtcattag ggactttcca atgggttttgc cccagtagat	5460
aaggtaata ggggtgaatc aacaggaaag tcccatttgc gccaagtaca ctgagtcaat	5520
agggactttc cattgggttt tgcccagtac aaaaggtcaa taggggtga gtcaatgggt	5580
ttttccattt attggcacgt acataaggc aataggggtg agtcatttttgc tttttccagc	5640
caatttaattt aaaacgcattt gtactttccc accattgacg tcaatgggtt attgaaacta	5700
atgcaacgtg acctttaaac ggtactttcc catagctgat taatggaaa gtaccgttct	5760
cgagccaata cacgtcaatg ggaagtggaaa gggcagccaa aacgtaacac cggccgggtt	5820
ttcccttgcgaa aattccatat tggcacgcattt tctattggct gagctgcgtt ctacgtgggt	5880
ataagaggcg cgaccagcgt cggtaccgtc gcagtcttcg gtctgaccac cgtagaacgc	5940
agaagcttgc cgccaccatg gtgagcaagc agatcctgaa gaacaccggc ctgcaggaga	6000
tcatgagctt caaggtgaac ctggaggcg tggtaacaa ccacgtgttc accatggagg	6060
gctgcggcaa gggcaacatc ctgttccggca accagctgggt gcagatccgc gtgaccaagg	6120
gcgcggccctt gcccatttgc ttcgacatcc tgagccccgc cttccagtttgc ggcaaccgca	6180
ctttcaccaaa gtaccccgag gacatcagcg acttcttcat ccagagcttc cccggccgtt	6240
tcgtgtacga gcgcaccctg cgctacgagg acggccgcctt ggtggagatc cgcagcgcaca	6300
tcaacctgat cgaggagatg ttcgtgtacc gcgtggagta caagggccgc aacttccca	6360
acgacggccc cgtgatgaag aagaccatca ccggcctgca gcccagcttc gaggtgggt	6420
acatgaacga cggcgtgctg gtggccagg tgatcctgggt gtaccgcctg aacagcggca	6480
agttctacag ctgcccacatg cgcaccctga tgaagagcaa gggcgtgggt aaggacttcc	6540
ccgagttacca cttcatccag caccgcctgg agaagaccta cgtggaggac ggcggcttcg	6600
tggagcagca cgagaccgccc atcgcccagc tgaccagcctt gggcaagccc ctggcagcc	6660

LBP30AND31.ST25.txt

tgcacgagtg	ggtgtaata	6679
<210>	2	
<211>	8251	
<212>	DNA	
<213>	Hamster sp.	
<220>		
<221>	misc_feature	
<223>	Seq. ID. No. 3: circular plasmid GS vector p12.4 hCMVp-GFP /clone 13	
<400>	2	
gaattcattg	atcataatca	60
gccataaccac	attttagat	
gttttacttg	ctttaaaaaa	
cctcccacac	ctccccctga	120
acctgaaaca	taaaatgaat	
gcaattgttg	ttgttaactt	
gtttattgca	gcttataatg	180
gttacaaata	aagcaatagc	
atcacaaatt	tcacaaataa	
agcattttt	tcactgcatt	240
ctagttgtgg	tttgcctaaa	
ctcatcaatg	tatcttatca	
tgtctggcgg	ccgcgcacctg	300
caggcgcaga	actggtaggt	
atggaagatc	atggaaagatc	
cctcgagatc		
cattgtgctg	gcggtaggcg	360
agcagcgcct	gcctgaagct	
gcgggcattc	gcgggcattc	
ccagtcagaa		
atgagcgcga	gtcgctgtcg	420
gctctcgga	ccgaagtgt	
atgattctcc	atgattctcc	
gccagcatgg		
cttcggccag	tgcgtcgagc	480
agcgccccgt	tgttcctgaa	
gtgccagtaa	agcgccggct	
gctgaacccc	caaccgttcc	540
gccagttgc	gtgtcgtag	
accgtctacg	accgtctacg	
ccgacccctgt		
tcaacaggc	cagggcggca	600
cggatcactg	tattcggtcg	
caactttgtc	caactttgtc	
atgcttgaca		
ctttatcact	gataaacata	660
atatgtccac	caacttatca	
gtgataaaga	atccgcgcga	
gcacaatgga	tctcgaggtc	720
gaggatctc	gaggatctc	
tagaggatcc	atattcgccg	
gcatcaccgg		
cgccacaggt	gcgggtgctg	780
gcgcctatat	gcgcctatat	
cggcgcacatc	accgatgggg	
aagatcgggc		
tcgcccacttc	gggctcatga	840
gcgcctgttt	cgcgctgggt	
atggtggcag	atggtggcag	
gccccgtggc		
cgggggactg	ttgggcgcca	900
tctccttgca	tgcaccattc	
cttgcggcgg	cttgcggcgg	
cggtgctcaa		
cggcctcaac	ctactactgg	960
gctgcttcct	aatgcaggag	
tcgcataagg	tcgcataagg	
gagagcgtcg		
acctcgggcc	gcgttgctgg	1020
cgttttcca	taggctccgc	
ccccctgacg	ccccctgacg	
agcatcacaa		
aaatcgacgc	tcaagtacaga	1080
ggtggcggaaa	cccgacagga	
ctataaagat	ctataaagat	
accaggcggt		
tccccctgga	agctccctcg	1140
tgcgcctctcc	tgttccgacc	
ctggcgctta	ctggcgctta	
ccggataacct		
gtccgccttt	ctcccttcgg	1200
gaagcgtggc	gctttctcat	
agctcacgct	agctcacgct	
gttaggtatct		
cagttcggtg	taggtcggttc	1260
gctccaagct	gggctgtgtg	
cacgaacccc	cacgaacccc	
ccgttcagcc		
cgaccgctgc	gccttatccg	1320
gtaactatcg	tcttgagttc	
aaccggtaa	aaccggtaa	
gacacgactt		
atcgccactg	gcagcagcca	1380
ctggtaacag	ctggtaacag	
gattagcaga	gattagcaga	
gcgaggtatg	gcgaggtatg	
taggcgggtgc		

LBP30AND31.ST25.txt

tacagagttc ttgaagtgg	1440
ctgcgctctg ctgaagccag	1500
acaaaccacc gctggtagcg	1560
aaaaggatct caagaagatc	1620
aaactcacgt taagggattt	1680
tttaaattaa aaatgaagtt	1740
cagttaccaa tgcttaatca	1800
catagttgcc tgactccccg	1860
ccccagtgct gcaatgatac	1920
aaaccagcca gccggaaggg	1980
ccagtctatt aattgttgcc	2040
caacgttgtt gccattgcta	2100
attcagctcc gttcccaac	2160
agcggttagc tccttcggtc	2220
actcatggtt atggcagcac	2280
ttctgtgact ggtgagttact	2340
ttgctcttgc ccggcgtcaa	2400
gctcatcatt ggaaaacgtt	2460
atccagttcg atgtaaccca	2520
cagcgtttct gggtagcaa	2580
gacacggaaa tggtaatac	2640
gggttattgt ctcatgagcg	2700
ggttccgcgc acatttcccc	2760
gacattaacc tataaaaata	2820
cgttcgtaat gttccgtggc	2880
tcaccttcgg gtggcccttt	2940
taaattccctt gcccgtttgg	3000
ggtgtggaaa gtcggcaggc	3060
agtccatcaac caggtgtgga	3120
tgcatctcaa ttatcgca	3180
ctccgcccag ttccgccccat	3240
aggccgaggc cgccctggcc	3300
gcctaggctt ttgcaaaaaag	3360
cacctcagca agttccact	3420
tgaacaaaaa catcaagcaa	
atgtacttgcgccttgc	

LBP30AND31.ST25.txt

gggtgagaaa	gtccaagcca	tgtatatctg	ggttgatgg	actggagaag	gactgcgctg	3480
caaaaaccgc	accctggact	gtgagccaa	gtgttagaa	gagttacctg	agtggaaattt	3540
tgatggctct	agtacctttc	agtctgaggg	ctccaaacagt	gacatgtatc	tcagccctgt	3600
tgccatgttt	cgggaccct	tccgcagaga	tcccaacaag	ctgggtttct	gtgaagttt	3660
caagtacaac	cggaagcctg	cagagaccaa	tttaaggcac	tcgtgtaaac	ggataatgga	3720
catggtgagc	aaccagcacc	cctggtttgg	aatggaacag	gagtataactc	tgatggaaac	3780
agatgggcac	ccttttggtt	ggccttccaa	tggctttcct	gggccccaaag	gtccgtattt	3840
ctgtggtgtg	ggcgcagaca	aagcctatgg	cagggatatc	gtggaggctc	actaccgcgc	3900
ctgcttgat	gctggggtca	agattacagg	aacaaatgct	gaggtcatgc	ctgcccagtg	3960
ggaactccaa	ataggaccct	gtgaaggaat	ccgcatggga	gatcatctct	gggtggcccg	4020
tttcatcttgc	catcgagttat	gtgaagactt	tggggtaata	gcaaccttttgc	accccaagcc	4080
cattcctggg	aactggaatg	gtgcaggctg	ccataccaaac	tttagcacca	aggccatgcg	4140
ggaggagaat	ggtctgaagc	acatcgagga	ggccatcgag	aaactaagca	agcggcaccg	4200
gtaccacatt	cgagcctacg	atcccaaggg	gggcctggac	aatgcccgtg	gtctgactgg	4260
gttccacgaa	acgtccaaca	tcaacgactt	ttctgctggt	gtcgccaatc	gcagtgccag	4320
catccgcatt	ccccggactg	tcggccagga	gaagaaaggt	tactttgaag	accgcggccc	4380
ctctgccaat	tgtgaccctt	ttgcagtgac	agaagccatc	gtccgcacat	gccttctcaa	4440
tgagactggc	gacgagccct	tccaaatacaa	aaactaatta	gactttgagt	gatcttgagc	4500
ctttcctagt	tcatcccacc	ccgccccaga	gagatctttg	tgaaggaacc	ttacttctgt	4560
ggtgtgacat	aattggacaa	actacctaca	gagattaaa	gctctaaggt	aaatataaaa	4620
tttttaagtgt	tataatgtgt	taaactactg	attctaattt	tttgtgtatt	ttagattcca	4680
acctatggaa	ctgatgaatg	ggagcagtgg	tggaatgcct	ttaatgagga	aaacctgttt	4740
tgctcagaag	aaatgccatc	tagtgcgtat	gaggctactg	ctgactctca	acattctact	4800
cctccaaaaaa	agaagagaaa	ggtagaagac	cccaaggact	ttccctcaga	attgctaagt	4860
tttttgagtc	atgctgtgtt	tagtaataga	actcttgctt	gctttgctat	ttacaccaca	4920
aaggaaaaag	ctgcactgct	atacaagaaa	attatggaaa	aatattctgt	aacctttata	4980
agtaggcata	acagttataa	tcataacata	ctgtttttc	ttactccaca	caggcataga	5040
gtgtctgcta	ttaataacta	tgctaaaaaa	ttgtgtacct	ttagcttttt	aatttgtaaa	5100
ggggttaata	aggaatattt	gatgtatagt	gccttgacta	gagatcataa	tcagccatac	5160
cacatttgc	gaggttttac	ttgctttaaa	aaacctccca	cacccccc	tgaacctgaa	5220
acataaaatg	aatgcaattt	ttgttgcatt	cttgcatttatt	gcagcttata	atggttacaa	5280
ataaaagcaat	agcatcacaa	atttcacaaa	taaagcattt	tttctactgc	attctagtttgc	5340
tggtttgc	aaactcatca	atgtatcttgc	tcatgtctgg	atctagcttc	gtgtcaagga	5400
cggtgactgc	agtgaataat	aaaatgtgtg	tttgtccgaa	atacgcgttt	tgagatttct	5460

LBP30AND31.ST25.txt

gtcgccgact aaattcatgt cgcgcgatag tggtgttat cgccgataga gatggcgata	5520
ttggaaaaat cgatatttga aaatatggca tattgaaaat gtcgcccgtg tgagttctg	5580
tgttaactgat atcgccattt ttccaaaagt gattttggg catacgcgat atctggcgat	5640
agcgcttata tcgtttacgg gggatggcga tagacgactt tggtgacttg ggcgattctg	5700
tgtgtcgcaa atatcgcagt ttcgatatacg gtgacagacg atatgaggct atatcgccga	5760
tagaggcgac atcaagctgg cacatggcca atgcataatcg atctatacat tgaatcaata	5820
ttggccatta gccatattat tcattggta tatagcataa atcaatattg gctattggcc	5880
attgcatacg ttgtatccat atcataatat gtacattat attggctcat gtccaaacatt	5940
accgcccattgt tgacattgtat tattgactag ttattaatag taatcaatta cggggtcatt	6000
agttcatagc ccatatatgg agttccgcgt tacataactt acggtaaatg gcccgcctgg	6060
ctgaccgccc aacgacccccc gcccattgac gtcaataatg acgtatgttc ccatagtaac	6120
gccaataggg actttccatt gacgtcaatg ggtggaggtat ttacggtaaa ctgcccactt	6180
ggcagtacat caagtgtatc atatgccaag tacgccccct attgacgtca atgacggtaa	6240
atggcccgcc tggcattatg cccagtacat gaccttatgg gactttccta cttggcagta	6300
catctacgta ttagtcatcg ctattaccat ggtgatgcgg ttttggcagt acatcaatgg	6360
gcgtggatag cggtttgact cacggggatt tccaagtctc cacccattt acgtcaatgg	6420
gagtttggtt tggcaccaaa atcaacggga ctttccaaaa tgtcgtaaca actccgcggc	6480
attgacgcaa atgggcggta ggcgtgtacg gtgggagggtc tatataagca gagctcgaaa	6540
agtgaaccgt cagatcgccct ggagacgcca tccacgctgt tttgacctcc atagaagaca	6600
ccgggaccga tccagcctcc gcggccggga acgggtcatt ggaacgcggaa ttccccgtgc	6660
caagagtgac gtaagtaccc cctatagagt ctataggccc acccccttgg cttcttatgc	6720
atgctatact gttttggct tggggcttat acacccccc ttcctcatgt tataagggtat	6780
ggtatacgctt agcctatagg tgtggttat tgaccattat tgaccactcc cctattgggt	6840
acgatacttt ccattactaa tccataacat ggctttgc cacaactctc tttattggct	6900
atatgccaat acactgtcct tcagagactg acacggactc tgtatttta caggatgggg	6960
tctcatttat tatttacaaa ttcacatata caacaccacc gtccccagtg cccgcagttt	7020
ttattaaaca taacgtggga tctccacgcg aatctcggtt acgtgttccg gacatgggct	7080
cttctccgggt agcggcggag cttctacatc cgagccctgc tcccatgcct ccagcgactc	7140
atggtcgctc ggcagtcct tgctcctaac agtggaggcc agacttaggc acagcacgt	7200
gcccaccacc accagtgtgc cgcacaaggc cgtggcggtt gggatgtgtt ctgaaaatga	7260
gctcggggag cgggcttgca cgcgtacgc atttggaaaga cttaaggcag cggcagaaga	7320
agatgcaggc agctgagttt ttgtgttctg ataagagtca gaggttaactc ccgttgcgg	7380
gctgttaacg gtggagggca gtgttagtctg agcagtactc gttgctgccc cgcgcgcccac	7440
cagacataat agctgacaga ctaacagact gttccttcc atgggtcttt tctgcagtca	7500

LBP30AND31.ST25.txt

ccgtccttga cacgaagctt gccgccacca tggtagagca gcaatcctg aagaacaccg	7560
gcctgcagga gatcatgagc ttcaaggtga acctggaggg cgtggtaac aaccacgtgt	7620
tcaccatgga gggctgcggc aaggcaaca tcctgttcgg caaccagctg gtgcagatcc	7680
gcgtgaccaa gggcgccccc ctgcccctcg cttcgacat cctgagccccc gccttccagt	7740
acggcaaccg cacccacc aagtaccccg aggacatcag cgacttcttc atccagagct	7800
tccccgccccg cttcgtgtac gagcgcaccc tgctacga ggacggcggc ctggtgagaa	7860
tccgcagcga catcaacctg atcgaggaga tggtcgta cccgtggag tacaagggcc	7920
gcaacttccc caacgacggc cccgtgatga agaagaccat caccggcctg cagcccagct	7980
tcgaggtggt gtacatgaac gacggcgtgc tggtggcca ggtgatcctg gtgtaccgccc	8040
tgaacagcgg caagttctac agctgccaca tgctcaccct gatgaagagc aagggcgtgg	8100
tgaaggactt ccccgagtac cacttcatcc agcaccgcct ggagaagacc tacgtggagg	8160
acggcggctt cgtggagcag cacgagaccg ccatcgccca gctgaccagc ctggcaagc	8220
ccctggcag cctgcacgag tgggtgtaat a	8251

<210> 3

<211> 10369

<212> DNA

<213> Hamster sp.

<220>

<221> misc_feature

<223> Seq. ID. No. 2: circular plasmid GS-minigene vector p 14.4 DeltaM
odulator (mod-) hCMVp-GFP /clone 6

<400> 3

gaattcatttgc atcataatca gccataccac attttagatag gttttacttg cttaaaaaaa	60
cctcccacac ctccccctga acctgaaaca taaaatgaat gcaattgttg ttgttaactt	120
gtttattgca gcttataatg gttacaataa aagcaatagc atcacaattt tcacaaataa	180
agcatttttt tcactgcatt ctatgtgg tttgtccaaa ctcataatg tatcttatca	240
tgtctggcgg ccgcgacctg caggcgcaga actggtaggt atgaaagatc cctcgagatc	300
cattgtctg gcggtaggcg agcagcgccct gcctgaagct gcgccattc ccagtcagaa	360
atgagcgcca gtcgtcgtcg gctctcgca ccgaagtgt atgattctcc gccagcatgg	420
ttcggccag tgcgtcgagc agcgcccgct tgttcctgaa gtgccagtaa agcgccggct	480
gctgaacccc caaccgttcc gccagttgc gtgtcgatcg accgtctacg ccgacctcgt	540
tcaacaggttc cagggcggca cggatcactg tattcgctg caactttgtc atgcttaca	600

LBP30AND31.ST25.txt

ctttatcact gataaacata atatgtccac caacttatca gtgataaaga atccgcgcca	660
gcacaatgga tctcgaggc gagggatctc tagaggatcc atattcgccg gcatcaccgg	720
cgccacaggt gcgggtgctg gcgcctatat cgccgacatc accgatgggg aagatcgggc	780
tcgcccacttc gggctcatga gcgcttgtt cggcgtgggt atggtggcag gccccgtggc	840
cgggggactg ttgggcgcca tctccttgca tgcaccattc cttgcggcgg cggtgctcaa	900
cggcctcaac ctactactgg gctgcttcct aatgcaggag tcgcataagg gagagcgtcg	960
acctcgggcc gcgttgcgtgg cgttttcca taggctccgc cccctgacg agcatcacaa	1020
aaatcgacgc tcaagtcaaga ggtggcgaaa cccgacagga ctataaagat accaggcggtt	1080
tccccctgga agctccctcg tgcgctctcc tggccgacc ctgcccgtta ccggataacct	1140
gtccgccttt ctcccttcgg gaagcgtggc gctttctcat agctcacgct gtaggtatct	1200
cagttcggtg taggtcggtc gctccaagct gggctgtgtg cacgaacccc ccgttcagcc	1260
cgaccgctgc gccttatccg gtaactatcg tcttgagtcc aaccggtaa gacacgactt	1320
atcgccactg gcagcagcca ctggtaacag gattagcaga gcgaggtatg taggcgggtgc	1380
tacagagttc ttgaagtgggt ggcctaacta cggctacact agaagaacag tattttgttat	1440
ctgcgctctg ctgaagccag ttacccctcg aaaaagagtt ggtagctctt gatccggcaa	1500
acaaaccacc gctggtagcg gtggttttt tggcaag cagcagatta cgccgagaaa	1560
aaaaggatct caagaagatc ctttgatctt ttctacgggg tctgacgctc agtggAACGA	1620
aaactcacgt taagggattt tggtcatgag attatcaaaa aggatcttca cctagatcct	1680
tttaaattaa aaatgaagtt taaaatcaat ctaaaagtata tatgagtaaa cttggctctga	1740
cagttacca tgcttaatca gtgaggcacc tatctcagcg atctgtctat ttcgttcatc	1800
catagttgcc tgactccccg tcgtgttagat aactacgata cgggagggct taccatctgg	1860
ccccagtgc gcaatgatac cgcgagaccc acgctcaccg gctccagatt tatcagcaat	1920
aaaccagcca gccggaaggg ccgagcgcag aagtggctct gcaactttat ccgcctccat	1980
ccagtctatt aattgttgcc gggaaagctag agtaagttagt tcgcccgtta atagttgcg	2040
caacgttggtt gccattgcta caggcatcgt ggtgtcacgc tcgtcggtt gtagggcttc	2100
attcagctcc ggttcccaac gatcaaggcg agttacatga tccccatgt tggcaaaaa	2160
agcggtagc tccttcggtc ctccgatcgt tgtcagaagt aagttggccg cagtgttac	2220
actcatggtt atggcagcac tgcataattc tcttactgtc atgccatccg taagatgctt	2280
ttctgtgact ggtgagtagt caaccaagtc attctgagaa tagtgtatgc ggcgaccgag	2340
ttgctcttgc ccggcgtcaa tacggataa taccgcgcca catagcagaa ctttaaaagt	2400
gctcatcatt gaaaaacgtt ctccggggcg aaaactctca aggtatcttac cgctgttgag	2460
atccagttcg atgttaaccca ctcgtgcacc caactgatct tcagcatctt ttactttcac	2520
cagcgtttct gggtgagcaa aaacaggaag gcaaaatgcc gcaaaaaagg gaataaggc	2580
gacacggaaa tggtaatac tcatactctt ctttttcaa tattattgaa gcatttatca	2640

LBP30AND31.ST25.txt

gggttattgt ctcatgagcg gatacatatt tgaatgtatt tagaaaaata aacaaatagg 2700
ggttccgcgc acatttcccc gaaaagtgc acctgacgta taagaaacca ttattatcat 2760
gacattaacc tataaaaata ggcgtatcac gaggccctga tggcttttgc cggcaccat 2820
cgttcgtaat gttccgtggc accgaggaca accctcaaga gaaaatgtaa tcacactggc 2880
tcacccctgg gtgggcctt ctgcgtttat aaggagacac tttatgtttt aagaagggtgg 2940
taaattccctt gcggctttgg cagccaagct agatccagct tttgcaaaa gcctaggcct 3000
ccaaaaaaagc ctcctacta cttctggat agctcagagg ccgaggcggc ctcggcctct 3060
gcataaataa aaaaaattag tcagccatgg ggcggagaat gggcggact gggcggagtt 3120
aggggcggga tgggcggagt tagggcggg actatggtt ctgactaatt gagatgcatg 3180
ctttgcatac ttctgcctgc tggggagcct gggactttc cacacctggt tgctgactaa 3240
tttagatgca tgctttgcat acttctgcct gctggggagc ctggggactt tccacaccct 3300
aactgacaca cattccacag ggaagctagc ttgaaattaa ttccccgccc cttccaata 3360
caaaaaactaa ttagactttg agtcatcttgc agccttcctt agttttgtt ttttggggc 3420
tcgtcgccag tctcatttag aaggcatgtg cggacgtgg ctctgtcac tgcaaagggg 3480
tcacaattgg cagagggcg gcggcttca aagtaacctt tcttccttgc ccgagccgag 3540
aatgggagta gagccgactg cttgattccc acaccaatct ctcgcccct ctcacttcgc 3600
ctcggtctcg tggctcggtt ccctgtccac cccgtccatc atccgcggg ccaccgctca 3660
gagcaccctc caccatggcc acctcagcaa gttcccactt gaacaaaaac atcaagcaaa 3720
tgtacttgc tctgccccag ggtgagaaag tccaagccat gtatatctgg gttgatggta 3780
ctggagaagg actgcgtgc aaaacccgca ccctggactg tgagcccaag tgtgtagaag 3840
agttacctga gtggatattt gatggctcta gtaccttca gtctgagggc tccaacagtgc 3900
acatgtatct cagccctgtt gccatgtttc gggacccctt ccgcagagat cccaaacaagc 3960
tgggtttctg tgaagttttc aagtacaacc ggaagcctgc agagaccaat ttaaggcact 4020
cgtgtaaacg gataatggac atggtgagca accagcaccc ctgtttggat atggacagg 4080
agtataactct gatgggaaca gatgggcacc cttttgggttgc gccttccaat ggctttctg 4140
ggcccaagg tccgtattac tgtgggtgttgc ggcggacaa agcctatggc agggatatcg 4200
tggaggctca ctaccgcgc tgcgttatgc ctggggtcaa gattacagga acaaattgtgc 4260
aggtcatgcc tgcccagtgg gaactccaaa taggaccctg tgaaggaatc cgcatggag 4320
atcatctctg ggtggccgt ttcatcttgc atcgagtatgc tgaagacttt gggtaatag 4380
caaccccttgc ccccaagccc attccctggat actggaaatgg tgcaggctgc cataccaaact 4440
ttagcaccaaa ggccatgcgg gaggagaatg gtctgaagta agtagctccc tctggaccat 4500
ctttatttctc atggggtggat aggccttgc ttttaggggttgc ggaaaagttt gacttctcac 4560
aaactacatg ccatgcttttgc ataaacccat cgtttgtac ccgttggaga 4620
agtgcacatgt ctcttaggaat agaattacag ctgtgatatgc ggaaagtttgc cacgttagtt 4680

LBP30AND31.ST25.txt

caagcattta aaggctttta gtaagaacta aatacacata caagcaagtg ggtgacttaa	4740
ttcttactga tgggaagagg ccagtatgg gggcttccc atccaaaaga taattggtat	4800
tacatgttga ggactggctc gaagcacccg agacataggc cacaaggcag acacagcctg	4860
catcaagtat ttattggttt cttatggAAC tcatgcctgc tcctgccctt gaaggacagg	4920
tttctagtga caaggtcaga ccctcacctt tactgcttcc accaggcaca tcgaggaggc	4980
catcgagaaa ctaagcaagc ggcaccggta ccacattcga gcctacgatc ccaagggggg	5040
gctggacaat gcccgtggtc tgactgggtt ccacgaaacg tccaacatca acgactttc	5100
tgctgggtgc gccaatcgca gtgccagcat ccgcattccc cggactgtcg gccaggagaa	5160
gaaaggttac tttgaagacc gccgcccctc tgccaattgt gaccctttg cagtacacaga	5220
agccatcgtc cgcacatgcc ttctcaatga gactggcgac gagcccttcc aatacaaaaa	5280
ctaatttagac tttgagtgat cttgagcctt tcctagttca tgccaccccg ccccagctgt	5340
ctcattgtaa ctcaaaggat ggaatatcaa cggctttttt attccctcgtg cccagttat	5400
ccttgctttt attggcaga atagaggagt caagttcttta atgcctatac accaacctca	5460
tttctttctt atttagcttt ctacgtgggg gtgggagggg tagggagggg taggcgaagg	5520
gaacgttaacc acatgcttca tctcatcagg aatgccatgt ccagtaggca gagctgccac	5580
agagtgggtg tatttgtgga ggaggacttt ttcttcagga cagttaaaag agcaggtcca	5640
ctgcttggat tgacaattcc cctataggta gagagcttgc tagttcttca ggtaaaccaa	5700
ctttctatttcaaaatggaaat ttaggtgagg agtagtggag gagttaatgc cctccatgaa	5760
gacagctcag tgtatcacct gagacagatg ggtagcccta ctgtaaaaga aggaaaagtt	5820
atttctgggt cctccattttta taacacaaag cagtagtattt tttatattta aatgtaaaaa	5880
caaaaaggat atatatgata tgtggatata tgtgtatttca taattcagaa accatcctag	5940
ttactgggtt tgccaagttt gaagagcttgc gttacaaga aaggatctct tgagttaggg	6000
tgggggtgca gtaccaggaa aggtggttat ctggggctca ggcctttattt actatgtgg	6060
gtttccctg cccactctgc aggacagat gctggacagg tagcagggtg ggacaccagt	6120
gcttgccacc acctgtccct gtgcttaggc taagatgcat atgtatccac acagagttag	6180
caggatggag ttggctggc aacttgaaca ttgttactga taggggtggg tggggtttat	6240
tttttgggtt gactagcatg tcactaaagc aggccctttt atatattaaa ttttttaaag	6300
caaaaacaagt tcagctttta atcaactttt tagggtttct aactttacag aattgcctgt	6360
ttgtttcagt gtctccatcc actttgcctt tgaggaaacg gaggacaggc agacctggag	6420
ttaaaaacatt tgcattttt tgcatagtg tctactttt cccagcagaa tattcctttc	6480
cttcttagga gtcctatgga gttttgtttt tgttttttt ctattacgtt aaacataaccc	6540
cacccattt ctggcttgc ctgctttctt ctggttttt gtgtgctgtc cgccagcaggc	6600
tgcctgtggc ttctcttgc catgacgact tctaattgcc atgtacagta tgttcagtta	6660
gataactcctt cattgtaaac agactgttaac tgccagagca ggcgttataa atcaacctaa	6720

LBP30AND31.ST25.txt

catttataag attcctctt gacttgttc tttgtggtg ggggaggaag aaaaaaaaaa	6780
gcgtgcagta ttttttgtt cttcatttc ctatcaaaag aaaggggagt gttctgttt	6840
tgttactcg caaaaataagc tagcttatct attggctttt cttttttttt ttttttttaa	6900
acgggctttt tcttgtacct ataatttggg gtaagggtg agagttttta tagtttttg	6960
agacagggtc ttggtgtata cccttggctg gcctggagct aactatgtag actgggctag	7020
ccttaactt gcagttctgc tttcaattag gttttataca ttttagtctt gcaattccta	7080
gttccacgtt taatctctt acattcaaa gcagtgttat ctgaagagtt caggcgcaga	7140
gtcaattcaa tagagttaca caaaaaccta aaaaacaagt tttaaatacc aagttatgtt	7200
ggcctggcca ctttcacag ctgtccacaa ctcaatgtga caaggctaca aattggatat	7260
actagaattt cctggtgatt tggaaaccct gcttcatttc ccggaaccag ggcttttgtt	7320
gacagtccta gcttatcaga ttattttaaa cagttactct tcctgcccctt cttcctgaga	7380
ccttgcacca gctgcccata gccatctaca cagtaactgc ttccctgttg aagtcactga	7440
aggcacatca gcccaagaca taaaggctg tcccggattc actagcctgg tgaacttgg	7500
gttctctgat gttttgtcct gttttgttgt gatttagtct caaatttccc agcctggttt	7560
gaaaatctgg gctcccagcc ttcaataagg aggactacag atatgtacga ctgagccctg	7620
attccagcct catgttata cgtctgtct cagctccctg aaggttccag tttgaaactc	7680
aataatccag gggtcagaaa gtcttgatct tatccccaca gtatggcacc aagcctggct	7740
gagccttctg acttagtctg ccctgttgct atttaagcac tttcttcac taggctaaaa	7800
ataaaaggag ctccctcctt tgccatggcg ctgtgcatga tagaaaaagg tagctatcta	7860
ctagcatatt aactccactg ttttgcttt gtgtgtttgg ttttgagga agggtctcaa	7920
ctgtgtatcc ctggctggcc tggccggatc tagttcgtg tcaaggacgg tgaggcgcgc	7980
caatattggc tattggccat tgcatacggtt gtatccatat cataatatgt acatttat	8040
tggctcatgt ccaacattac cgccatgttg acattgatta ttgactagtt attaata	8100
atcaattacg gggtcattag ttcatagccc atatatggag ttcccggtta cataacttac	8160
gttaaatggc ccgcctggct gaccgccccaa cgaccccccgc ccattgacgt caataatgac	8220
gtatgttccc atagtaacgc caataggac tttccattga cgtcaatggg tggagtattt	8280
acggtaaact gcccacttgg cagtacatca agtgtatcat atgccaagta cgccccctat	8340
tgacgtcaat gacggtaaat ggccgcctg gcattatgcc cagtagatga ctttatggga	8400
ctttcctact tggcagtaca tctacgtatt agtcatcgct attaccatgg tgatgcggtt	8460
ttggcagtac atcaatgggc gtggatagcg gtttgactca cggggatttc caagtctcca	8520
ccccattgac gtcaatggga gtttggggc gcacccaaat caacgggact ttccaaaatg	8580
tcgtaacaac tccgccttgc tgacgcaaattt gggcggtagg cgtgtacggg gggaggtcta	8640
tataagcaga gctcggtttt tagtgcgtca gatgcgcctgg agacgcccattc cacgctgttt	8700
tgacctccat agaagacacc gggaccgatc cagcctccgc ggccggaaac ggtgcattgg	8760

LBP30AND31.ST25.txt

aacgcggatt ccccgtgccca agagtgcacgt aagtaccgcctatagagtct ataggccac	8820
cccccttggct tcttatgcat gctatactgt ttttggcttg gggctatac acccccgctt	8880
cctcatgtta taggtgatgg tatagcttag cctataggtg tgggttattg accattattg	8940
accactcccc tattgggtgac gatactttcc attactaatc cataacatgg ctctttgcca	9000
caactctctt tattggctat atgccaatac actgtcccttc agagactgac acggactctg	9060
tatTTTACA ggatggggtc tcatttatta tttacaaatt cacatataca acaccaccgt	9120
ccccagtgcc cgcagttttt attaaacata acgtgggatc tccacgcgaa tctcgggtac	9180
gtgttccgga catgggctct tctccggtag cggcggagct tctacatccg agccctgctc	9240
ccatgcctcc agcgactcat ggtcgctcgg cagctcccttg ctccctAACAG tggaggccag	9300
acttaggcac agcacgatgc ccaccaccac cagtgtgccg cacaaggccg tggcggtagg	9360
gtatgtgtct gaaaatgagc tcggggagcg ggcttgcacc gctgacgcatttggaaagact	9420
taaggcagcg gcagaagaag atgcaggcag ctgagttgtt gtgttctgat aagagtcaga	9480
gttaactccc gttgcggtagc tgttaacgggt ggagggcagt gtagtctgag cagtactcgt	9540
tgctgcgcgc cgccacca gacataatag ctgacagact aacagactgt tcctttccat	9600
gggtcttttc tgcagtcacc gtccttgaca cgaagcttcg cggcaccatg gtgagcaagc	9660
agatcctgaa gaacaccggc ctgcaggaga tcatgagctt caaggtgaac ctggaggccg	9720
tggtaacaa ccacgtgttc accatggagg gctgcggcaa gggcaacatc ctgttcggca	9780
accagctggc gcagatccgc gtgaccaagg ggcggccctt gcccctcgcc ttgcacatcc	9840
tgagccccgc cttccagtac ggcaaccgca cttcaccaa gtaccccgag gacatcagcg	9900
acttcttcatttccagcttc cccggcggct tcgtgtacga ggcgcaccctg cgctacgagg	9960
acggcggcctt ggtggagatc cgacgcaca tcaacctgat cgaggagatg ttcgtgtacc	10020
gcgtggagta caagggccgc aacttccca acgacggccc cgtgatgaag aagaccatca	10080
ccggcctgca gcccagcttc gaggtgggtt acatgaacga cggcgtgctg gtggggccagg	10140
tgatcctgggt gtaccgcctg aacagcggca agttctacag ctgccacatg cgccacccatg	10200
tgaagagcaa gggcgtgggtt aaggacttcc ccgagtacca cttcatccag caccgcctgg	10260
agaagaccta cgtggaggac ggcggcttcg tggagcagca cgagaccgca atcgcccagc	10320
tgaccagcctt gggcaagccc ctggcagcc tgcacgagtg ggtgtataata	10369

<210> 4

<211> 13535

<212> DNA

<213> Hamster sp.

<220>

<221> misc_feature

LBP30AND31.ST25.txt

<223> Seq. ID. No. 1: circular plasmid GS + IgG 2A hot spot targetting vector pEE 15.1 hCMVp-GFP /clone 11

<400> 4
 gaattcattg atcataatca gccataccac attttagatg gtttacttg cttaaaaaaa 60
 cctccacac ctccccctga acctgaaaca taaaatgaat gcaattgtt ttgttaactt 120
 gtttattgca gcttataatg gttacaaata aagcaatagc atcacaaatt tcacaaataa 180
 agcattttt tcactgcatt ctatgttgg tttgtccaa ctcataatg tatcttatca 240
 tgtctggcg ccgcgacctg caggcgcaga actggtaggt atgaaagatc cctcgagatc 300
 cattgtgctg gcggtaggcg agcagcgcct gcctgaagct gcgggcattc ccagtcagaa 360
 atgagcgcca gtcgtcgtcg gctctggca ccgaagtgt atgattctcc gccagcatgg 420
 ctccggccag tgcgtcgcagc agcgcggct tttctgaa gtgccagtaa agcgcggct 480
 gctgaacccc caaccgttcc gccagttgc gtgtcgtag accgtctacg ccgacctcgt 540
 tcaacaggta tagggcggca cggatcactg tattcggtg caacttgc atgcttgaca 600
 ctttatcaact gataaacata atatgtccac caacttatca gtgataaaga atccgcgcca 660
 gcacaatgga tctcgaggta gagggatctc tagaggatcc atattcgca atatgcggc 720
 atcaccggcg ccacagggtgc gttgtggc gcctataatcg ccgacatcac cgatgggaa 780
 gatcgggctc gccacttcgg gtcatacg gttgtttcg gcgtgggtat ggtggcaggc 840
 ccgtggccgg gggactgttgg ggcgcacatct cttgcatgc accattcctt gcggcggcgg 900
 tgctcaacgg cctcaaccta ctactggct gttcctaatt gcaggagtcg cataagggag 960
 agcgtcgagt cttccgtgtt cgaagcgatc cctgtccagt ggtgtgcaca cttcccgac 1020
 tgcctgcag tctgacctct acaccctcag cagtcagtg actgtacacct cgacacctg 1080
 gcccagccag tccatcacct gcaatgtggc ccacccggca agcagcacca aggtggacaa 1140
 gaaaatttgtt gaggaaaaca agggagtag aggttcacaa gtgattagtc taaggccta 1200
 gccttagctag accagccagg atcagcagcc atcacaaaa atggaaacct ggccagaag 1260
 agaaggagat actgactgtg actccctctt ggaaacttct aactatgacc acctaccctc 1320
 aaggtcatga tcctctagga tagatgtcct tggtcatttc caggatcatc ctgacctaag 1380
 gccataacca gggacaaagt ccctggtttgg gtgccttttc tcctcaaacc ttgagtaacc 1440
 cccagccttc tctctgcaga gcccagaggg cccacaatca agccctgtcc tccatgcaaa 1500
 tgcccaggtt agtcactaga ccagagctcc acccgggaga atggtaagtg ctgtaaacat 1560
 ccctgcacta gaggataagc catgtacaga tccatttcca tctctcctca tcagcaccta 1620
 acctcttggg tggaccatcc gtcttcatttcc tccctccaaa gatcaaggat gtactcatga 1680
 tctccctgag cccatagtc acatgtgtgg tggtgatgt gagcgaggat gacccagatg 1740
 tccagatcag ctggtttgg aacaacgtgg aagtacacac agctcagaca caaaccata 1800
 gagaggatta caacagtact ctccgggtgg tcagtccct cccatccag caccaggact 1860

LBP30AND31.ST25.txt

ggatgagtgg caaggagttc aaatgcaagg tcaacaacaa agacctccca gcgcccatcg	1920
agagaaccat ctcaaaaccc aaaggtgaga gctgcagcct gactgcatgg gggctggat	1980
gggcataagg ataaaggtct gtgtggacag cttctgctt cagccatgac ctttgttat	2040
gtttctaccc tcacagggtc agtaagagct ccacaggtat atgtcttgcc tccaccagaa	2100
gaagagatga ctaagaaaca ggtcactctg acctgcatgg tcacagactt catgcctgaa	2160
gacatttacg tggagtggac caacaacggg aaaacagagc taaactacaa gaacactgaa	2220
ccagtcctgg actctgatgg ttcttacttc atgtacagca agctgagagt ggaaaagaag	2280
aactgggtgg aaagaaatag ctactcctgt tcagtggtcc acgagggtct gcacaatcac	2340
cacacgacta agagcttctc ccggactccg gttaaatgag ctcagcaccc acaaaactct	2400
caggtccaaa gagacacccca cactcatctc catgcttccc ttgtataat aaagcacccca	2460
ccaatgcctg ggaccatgta aaactgtcct gttctttcc aaggataga gcatagctca	2520
caggctgata ttctggcca gggttggagg acagccttgt ctataggaag agaatgaggt	2580
ttttgcactg caggactcag agtcatttag ttatcctgcc ttggagtgtt gggcttggc	2640
tttaggcagt gcctttcct tgccttccta cgaaccagca gctgccatac atagagataa	2700
tccttaggaag cctcaaattgg agaaggacac aaacccaccc ccctcaggct gttcctctat	2760
cccgccccca ttcttttacc tagggtttc tctgagtcta ttgtggagtt acacatggcc	2820
aggggcattc cagagacccct tgtcatccat acactcaact caggcagctt tgcacaaaca	2880
aagtctgcac acccatacag atggctcaact ttgcctgtg ccattgttaggg ctgaggcaca	2940
tggctcttgc tgcccaagg gagggactat tagatagcca cactcatgct gaatcctggc	3000
ccattcaaatt tagcctgctg aacaccatcc agtccatata gcacatgtat ccacatgcac	3060
gtgtgcacaa aacgcattta atacactggg acaacaattc tgtgccctgc acagcaccta	3120
tatccagcaa tgtatcacca tacacacgac caaaaaaatt caatgcccac gtttctgcca	3180
tcacaaacag acacatctt cctctctgtg gccactgcat tatatgctca acacaagacc	3240
tctgaagcca gatccatctc tggcacctcg gggcatgct tcaacccac atgaattatg	3300
caaaccatag ccataatggt ctgaatcaact tcacactggg atgttccaa gttcaggcaa	3360
gacgagccac aggctctgct gatgactgaa ggacagcaa gggcagtc agctgtatag	3420
ccactgttga cctgggtcac aggccctgct gaccctccac cttctctgt actgaaggaa	3480
tgaaagatga gacaagcata gagggcactt gaataatcca ggtcactctg aggtccaccc	3540
aaggcattat tggactcagg tgggaagctg agactggat cccagaggaa aaggaaggaa	3600
agcaggcccc ggggagggtc tgctgtccca gtcaggctgg agatctctcc tctgaatcca	3660
tgcagacatg tctgcctcac aggaaatctc tcccagcacc aaccatgttg ggacaaacac	3720
tgactgtcct ctctgttcag ggctagaccc ggtatgtgtc tgtgctgagg cccaggacgg	3780
ggagctggac ggccctctgga cgaccatcac catcttcac agccttcc tgctcagcgt	3840
tgctacagc gcctctgtca cactttcaa ggttggcact gtctcccacc ctctgctgtg	3900

LBP30AND31.ST25.txt

atggctacac	tgaccacaaa	atgtcctctc	actcctcccc	agatgttagta	ggacgttact	3960
ttgctgcccc	tactctgtcc	cacacaccat	ttcctccatt	ccctgagcca	tcccacattg	4020
ttctatgtga	ctccacattg	tgtccatac	agtctgcctt	tctgtctctc	tggctgtcct	4080
gcgtgatcct	gatactgtct	tatgagacca	aacctccttgc	cattccacac	tagccttcat	4140
gaggttcaat	gctgtcttac	acacaatccc	ctcagcctca	ccatggctca	aggtaactctg	4200
tgagctatcc	tcataccatc	tccacctcaa	ctcccacaat	atctccactc	tgacccttcc	4260
cataccca	ctcctacctg	tatgaaggga	attgaaggag	agacaggtcg	acctctgtct	4320
ttcccacaga	ttggagggtc	tgagcatggg	cgtggctct	gactttctct	cacttcccc	4380
caggtaaagt	ggatcttctc	ctctgtggtg	gagctgaagc	agacgatctc	ccctgactac	4440
agaaacatga	ttgggcaggg	agcctaggcc	acttcctctg	ggatcagaag	agcttcctag	4500
gccctgcaga	agcccatcca	tcctactgtg	cagcctaaca	gggaggccac	actctagccc	4560
tatgactctc	tgatcagaac	tccatggtc	tcctctttgg	aggaccacgt	gcagtgcagg	4620
cttgccca	acctaaacac	ttccacagca	gtcgccagat	atctaactac	tccggaccag	4680
aagaaccatc	tccttccaaa	ccagca	ggatctgaga	tctcagaatg	ttgcctaag	4740
aagagctgga	aatccaggct	tcctgtgttc	tgctacaagg	acatcagcct	ggatttgacc	4800
tggaccacac	atttcatct	aatgagttt	tccacaaagg	acacgtttca	gatccttgaa	4860
tgagacctct	acatggaaga	ccagagtcac	tataccaaa	ggtcactctg	tatccttgca	4920
ccagctatac	tggacagctt	ccttcctgg	acttcagtga	ccctggctga	ggaaaggatc	4980
tgtgacctca	actgtttgga	gagcctctgg	aagatgtgt	cttcttcc	tgctaccacc	5040
aacatgctgg	atctcagatg	cagaatccaa	tccacagaca	ccactgacca	cacaacctga	5100
agacaaggcc	attgccac	ccacagagat	gccatccaca	ctctgtggag	aaataaggag	5160
tgctttgtgc	agcctctgca	aagctctggc	agggattaga	gtatacacac	tgagtactga	5220
ctaggtgacc	aggcagaaaa	acctccagga	gaaggaacaa	tggggagag	atgtgaacag	5280
atagttagaa	aaagcatggt	gtcacaggc	tgctctgtgg	actgatttcc	agattggacc	5340
acctacagca	gaaaccatcg	gttgca	aatcttagga	ggaccaac	ggaataggag	5400
ggctgctgt	gtcaatggag	atgacac	tatctatttc	tccactgcct	cttatgacca	5460
ataagaagcc	agagtctcca	gacagaaa	aagaaagaaa	gaaagaaaga	aagaaagaaa	5520
gaaagagaga	gagagagaga	gagagagaga	gaggaaggaa	ggaaggaagg	aaggaaggaa	5580
ggaaggaagg	aggaggagga	ggaggaggag	gaggaggaga	gagagagaga	gagagagaga	5640
gagagagaga	gagcaccagc	tttctgtga	ctggaaggaa	atgcttagag	agcttggatc	5700
tttaaagctt	ctttttcta	gagaccatga	atgtcttgc	tctctctctc	tctctctctc	5760
tctctctctc	tctctctctc	tctctctgt	tgtgtgtgt	tgtgtgtgt	tgtgtgtgcg	5820
tgcatgcacg	ctattgttt	ggcatttgaa	acaataaaac	attctttaa	tattctgtat	5880
ctcatggttc	cccttctgtg	tggatcagcc	ctaacaccca	ggaacagggg	acaataaaca	5940

LBP30AND31.ST25.txt

gaccacagcc atgtacagcc ttctacacctcc cttctggttc tgacctccca gaggtccctc	6000
agtggggcccc tcacagctgg gtttcttccc tggcagtgcc accaagagct cagggcacctc	6060
tgagctggag gctgtcctga tgccataggc aggctatgga gcagagatga tgaccacggt	6120
ggactccagg ttagccaggc aaagcctccc atgccagaag agaagcgtgt ggtactcact	6180
ggcctcgggc tgctacggat tcagcaaaga gcatggatcg cttcgaagcc tccaagctcg	6240
acctcgggcc gcgttgctgg cgttttcca taggctccgc ccccccgtacg agcatcacaa	6300
aaatcgacgc tcaagtcaga ggtggcggaaa cccgacagga ctataaagat accaggcggt	6360
tcccccttggaa agctccctcg tgcgcctcctcc tggccgacc ctggccgtta ccggataacct	6420
gtccgccttt ctcccttcgg gaagcgtggc gctttctcaa tgctcacgct gtaggtatct	6480
cagttcggtg taggtcggtc gctccaagct gggctgtgtg cacgaacccc ccgttcagcc	6540
cgaccgcgtgc gccttatccg gtaactatcg tcttgagtcc aacccggtaa gacacgactt	6600
atcgccactg gcagcagcca ctggtaacag gattagcaga gcgaggtatg taggcgggtgc	6660
tacagagttc ttgaagtggg ggcctaacta cggctacact agaaggacag tattttgttat	6720
ctgcgcctcg ctgaagccag ttaccttcgg aaaaagagtt ggtagctctt gatccggcaa	6780
acaaaccacc gctggtagcg gtgggttttt tggggcaag cagcagatta cgccgcggaaa	6840
aaaaggatct caagaagatc ctttgatctt ttctacgggg tctgacgctc agtggAACGA	6900
aaactcacgt taagggattt tggtcatgag attatcaaaa aggatcttca cctagatcct	6960
tttaaattaa aaatgaagtt ttaaatcaat ctaaagtata tatgagtaaa cttgggtctga	7020
cagttaccaa tgcttaatca gtgaggcacc tatctcagcg atctgtctat ttgcgttcatc	7080
catagttgcc tgactccccg tcgtgttagat aactacgata cgggagggtt taccatctgg	7140
ccccagtgct gcaatgatac cgccggacccc acgctcaccg gctccagatt tatcagcaat	7200
aaaccagcca gccggaaaggg ccgagcgcag aagtggtcct gcaactttat ccgcctccat	7260
ccagtctatt aattgttgcc gggaaagctag agtaagtagt tcgcccagtta atagtttgcg	7320
caacgttgtt gccattgcta caggcatcg ggtgtcacgc tcgtcggtt gtatggcttc	7380
attcagctcc ggttcccaac gatcaaggcg agttacatga tccccatgt tggcaaaaaa	7440
agcgggttagc tccttcggtc ctccgatcgt tgtcagaagt aagttggccg cagtgttatac	7500
actcatggtt atggcagcac tgcataattc tcttactgtc atgcccattcg taagatgctt	7560
ttctgtact ggtgagtagt caaccaagtc attctgagaa tagtgtatgc ggccgaccgag	7620
ttgctcttgc ccggcgtcaa cacggataa taccgcgcca catagcagaa cttaaaaagt	7680
gctcatcatt gaaaaacgtt cttcggggcg aaaactctca aggatcttac cgctgttgag	7740
atccagttcg atgtaaccca ctcgtgcacc caactgatct tcagcatctt ttactttcac	7800
cagcgtttct gggtagccaa aaacaggaag gcaaaatgcc gcaaaaaagg gaataaggc	7860
gacacggaaa tggtaatac tcatactctt ctttttcaa tattattgaa gcatttatca	7920
gggttattgt ctcgtacgtc gatacatatt tgaatgtatt tagaaaaata aacaaatagg	7980

LBP30AND31.ST25.txt

ggttccgcgc acatttcccc gaaaagtgcc acctgacgtc taagaaacca ttattatcat	8040
gacattaacc tataaaaata ggcgtatcac gaggccctga tggctcttg cggcacccat	8100
cgttcgtaat gttccgtggc accgaggaca accctcaaga gaaaatgtaa tcacactggc	8160
tcaccttcgg gtgggcctt ctgcgttat aaggagacac tttatgttta agaaggttgg	8220
taaattcctt gcggcttgg cagccaagct agagatccgg ctgtggaatg tgtgtcagtt	8280
agggtgtgga aagtccccag gctccccagc aggccagaat atgcaaagca tgcatactcaa	8340
ttagtcagca accaggtgtg gaaagtcccc aggctccca gcagggagaa gtatgcaag	8400
catgcatactc aattagtcag caaccatagt cccgccccata actccgcccc tcccgcctt	8460
aactccgccc agttccgccc attctccgccc ccatggctga ctaatttttt ttatttatgc	8520
agaggccgag gccgcctcgg cctctgagct attccagaag tagtgaggag gctttttgg	8580
aggcttaggc ttttgcaaaaa agctagcttggggccaccgc tcagagcacc ttccaccatg	8640
gccacccatcag caagttccca cttgaacaaa aacatcaagc aaatgtactt gtgcctgccc	8700
cagggtgaga aagtccaaagc catgtatatc tgggttcatg gtactggaga aggactgcgc	8760
tgcaaaaaccc gcacccctgga ctgtgagccc aagtgtgttag aagagttacc tgagtggaaat	8820
tttgcatttgc cttagtacattt tcagtcgtgag ggctccaaaca gtgacatgtatc tctcagccct	8880
gttgcattgt ttcgggaccc cttccgcaga gatcccaaca agctgggttt ctgtgaagtt	8940
ttcaagtaca accggaagcc tgcagagacc aatttaaggc actcgtgtaa acggataatg	9000
gacatggtga gcaaccagca cccctgggtt ggaatggaaac aggagtatac tctgatggga	9060
acagatggc acccttttgg ttggccttcc aatggctttc ctgggccccca aggtccgtat	9120
tactgtggtg tggcgcaga caaagcctat ggcagggata tcgtggaggc tcactaccgc	9180
gcctgcttgt atgctgggtt caagattaca ggaacaaatg ctgaggtcat gcctgcccag	9240
tgggaactcc aaataggacc ctgtgaagga atccgcattt gagatcatct ctgggtggcc	9300
cgtttcatct tgcatacgagt atgtgaagac tttgggtta tagcaacctt tgaccccaag	9360
cccatccctg ggaactggaa tggcgcaggc tgccataccaa acttttagcac caaggccatg	9420
cgggaggaga atggctgtgaa gcacatcgag gaggccatcg agaaactaag caagcggcac	9480
cggtaccaca ttgcagccata cgatcccaag gggggcctgg acaatgccccg tggctctgact	9540
gggttccacg aaacgtccaa catcaacgac tttctgtgt gtgtcgccaa tcgcagtgcc	9600
agcatccgc tttcccgac tggcgcaggc gagaagaaag gttactttga agaccgcggc	9660
ccctctgcca attgtgaccc ctttgcagt acagaagcca tcgtccgcac atgccttctc	9720
aatgagactg gcgacgagcc cttccaatac aaaaactaat tagactttga gtgatcttga	9780
gcctttccta gttcatccca ccccgccccca gagagatctt tgtgaaggaa ccttacttct	9840
gtgggtgtgac ataattggac aaactaccta cagagatttaa aagctctaag gttaatataa	9900
aatttttaag tgtataatgt gttaaactac tgattctaattt gtgtgtgtatc tttagattc	9960
caacccatgg aactgtatgaa tgggagcagt ggtggaaatgc cttaatgag gaaaacctgt	10020

LBP30AND31.ST25.txt

tttgctcaga agaaatgcca tctagtatg atgaggctac tgctgactct caacattcta 10080
ctccctccaaa aaagaagaga aaggtagaag accccaagga ctttccttca gaattgctaa 10140
gtttttgag tcatgctgtg ttttagtaata gaactcttgc ttgccttgct atttacacca 10200
caaaggaaaa agctgcactg ctatacaaga aaattatgga aaaatattct gtaacctta 10260
taagtaggca taacagttat aatcataaca tactgtttt tcttactcca cacaggcata 10320
gagtgtctgc tattaataac tatgctcaaa aattgtgtac ctttagctt ttaatttcta 10380
aaggggtaa taaggaatat ttgatgtata gtgccttgac tagagatcat aatcagccat 10440
accacatttgc tagaggtttt acttgcttta aaaaacctcc cacacccccc cctgaacctg 10500
aaacataaaaa tgaatgcaat tgggttttt aacttggta ttgcagctta taatggttac 10560
aaataaagca atagcatcac aaatttcaca aataaagcat tttttcact gcattctagt 10620
tgtggtttgtt ccaaactcat caatgtatct tatcatgtct ggatctctag cttcgtgtca 10680
aggacggtga ctgcagtgaa taataaaatg tgggtttgtc cgaaatacgc gttttgagat 10740
ttctgtcgcc gactaaatttgc atgtcgccgc atagtggtgt ttatcgccga tagagatggc 10800
gatattggaa aaatcgatata ttgaaaatat ggcattttga aaatgtcgcc gatgtgagtt 10860
tctgtgttaac tgatatcgcc atttttccaa aagtgatttt tgggcatacg cgatatctgg 10920
cgatagcgct tatatcggtt acggggatg gcgatagacg actttggta cttggcgat 10980
tctgtgtgtc gcaaataatcg cagttcgat ataggtgaca gacgatatga ggctatatcg 11040
ccgatagagg cgacatcaag ctggcacatg gccaatgcat atcgatctat acattgaatc 11100
aatattggcc attagccata ttattcattt gttatatacg ataaatcaat attggctatt 11160
ggccatttgca tacgttgtat ccatatcata atatgtacat ttatattggc tcatgtccaa 11220
cattaccgccc atgttgacat tgattattga ctagtttata atagtaatca attacgggt 11280
cattagttca tagcccatat atggagttcc gcgttacata acttacggta aatggccgc 11340
ctggctgacc gccaacgac ccccccattt tgacgtcaat aatgacgtat gttcccatag 11400
taacgccaat agggactttc cattgacgtc aatgggtgga gtatattacgg taaactgccc 11460
acttggcagt acatcaagtg tatcatatgc caagtacgcc ccctattgac gtcaatgacg 11520
gtaaatggcc cgccctggcat tatgcccagt acatgacctt atgggacttt cctacttggc 11580
agtacatcta cgtatttagtc atcgcttata ccatggtgat ggggtttgg cagtagatca 11640
atgggcgtgg atagcggttt gactcacggg gatttccaag tctccacccc attgacgtca 11700
atgggagttt gtttggcac caaaatcaac gggactttcc aaaatgtcgt aacaactccg 11760
ccccattgac gccaatgggc ggtaggcgtg tacgggtggga ggtctatata agcagagctc 11820
gttttagtcaa ccgtcagatc gcctggagac gccatccacg ctgttttgc ctccatagaa 11880
gacaccggga ccgatccagc ctcccgccggcc gggAACGGTG cattggAACG CGGATTCCCC 11940
gtgccaagag tgacgttaatg accgcctata gagtctatag gcccaccccc ttggcttctt 12000
atgcatgcta tactgtttt ggcttgggtt ctatacaccg ccgcattcctc atgttatagg 12060

LBP30AND31.ST25.txt

tgatggtata gcttagccta taggtgtggg ttattgacca ttattgacca ctcccattt	12120
ggtgacgata ctttccatta ctaatccata acatggctct ttgccacaac tctctttattt	12180
ggctatatgc caatacactg tccttcagag actgacacgg actctgtatt tttacaggat	12240
ggggtctcat ttattattta caaattcaca tataacaacac caccgtcccc agtgcggcga	12300
gtttttatta aacataacgt gggatctcca cgcaatctc gggtagtgt tccggacatg	12360
ggctcttctc cggtagcggc ggagcttcta catccgagcc ctgctccat gcctccagcg	12420
actcatggtc gctcgccagc tccttgctcc taacagtgga ggccagactt aggcacagca	12480
cgtatgcccac caccaccagt gtgcgcaca aggccgtggc ggtagggtat gtgtctgaaa	12540
atgagctcgg ggagcgggct tgcaccgctg acgcatttgg aagacttaag gcagcggcag	12600
aagaagatgc aggcagctga gttgttgtt tctgataaga gtcagaggta actcccttg	12660
cggtgctgtt aacggtgag ggcagtgtag tctgagcagt actcgttgt gccgcgcgcg	12720
ccaccagaca taatagctga cagactaaca gactgttcc ttccatgggt cttttctgca	12780
gtcaccgtcc ttgacacgaa gcttgccgcc accatggtga gcaaggcagat cctgaagaac	12840
accggcctgc aggagatcat gagcttcaag gtgaacctgg agggcgtggt gaacaaccac	12900
gtgttacca tggagggctg cggcaagggc aacatcctgt tcggcaacca gctggtgcag	12960
atccgcgtga ccaagggcgc cccctgccc ttgccttcg acatcctgag cccgccttc	13020
cagtacggca accgcacctt caccaagtac cccgaggaca tcagcgactt cttcatccag	13080
agcttccccg ccggcttcgt gtacgagcgc accctgcgt acgaggacgg cggcctggtg	13140
gagatccgca gcgcacatcaa cctgatcgag gagatgttcg tgtaccgcgt ggagtacaag	13200
ggccgcaact tcccccaacga cggccccgtg atgaagaaga ccatcaccgg cctgcagccc	13260
agcttcgagg tggtgtacat gaacgcacggc gtgctggtgg gccaggtgat cctggtgtac	13320
cgcctgaaca gcggcaagtt ctacagctgc cacatgcgca ccctgatgaa gagcaaggc	13380
gtggtaagg acttccccga gtaccacttc atccagcacc gcctggagaa gacctacgtg	13440
gaggacggcg gcttcgtgga gcagcacgag accgccatcg cccagctgac cagcctggc	13500
aagccccctgg gcagcctgca cgagtgggtg taata	13535